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REMARKS

Claims 15, 19, 21-22, 26-28 and new claims 30-48 are pending in this application.

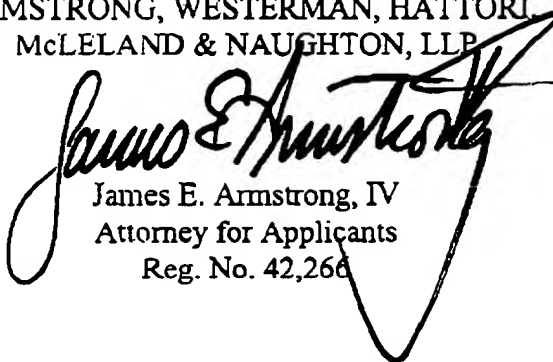
Claims 19, 21 and 22 have been amended to address formal matters. Please consider this Supplemental Preliminary Amendment as placing the claims in condition for allowance.

If, for any reason, it is believed that this application is not now in condition for allowance, the Examiner is requested to contact Applicant's undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, Applicant respectfully petitions for an appropriate extension of time. The fees for such an extension or any other fees which may be due with respect to this paper, may be charged to Deposit Account No. 01-2340.

Respectfully submitted,

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Enclosure: Version with Markings to Show Changes Made

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VERSION WITH MARKINGS SHOWING CHANGES

19. (Amended) A method for determining an amount of one of two types of thyroglobulin in a fluid sample originating from a living body, the two types of thyroglobulin in the sample being a specific thyroglobulin, which is thyroglobulin having a sugar chain with a specific structure to which a specific lectin or a specific antibody is capable of binding; and other thyroglobulin, which is thyroglobulin having a sugar chain other than the specific sugar chain to which said specific lectin or said specific antibody is capable of binding; the method comprising the steps of:

(a) adding an anti-thyroglobulin antibody reactive with both the specific thyroglobulin and the other thyroglobulin to the sample [forming] to form conjugates of the anti-thyroglobulin antibody and all the thyroglobulin in the sample,

(b) adding said specific lectin or said specific antibody to the sample [forming] to form conjugates of said specific lectin or said specific antibody with the specific thyroglobulin conjugates formed in (a), and

(c) determining the amount of specific thyroglobulin by measuring the amount of the specific thyroglobulin conjugates formed in (b).

21. (Amended) A method for determining both a total amount and an amount of one of two types of thyroglobulin in a fluid sample originating from a living body, the two types of thyroglobulin in the sample being a specific thyroglobulin, which is thyroglobulin having a sugar chain with a specific structure to which a specific lectin or a specific antibody is capable of binding;

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and other thyroglobulin, which is thyroglobulin having a sugar chain other than the specific sugar chain to which said specific lectin or said specific antibody is capable of binding; the steps comprising:

(a)(i) adding to the sample said specific lectin or said specific antibody [forming] to form conjugates of said specific lectin or said specific antibody with the specific thyroglobulin, and

(ii) adding to the sample an anti-thyroglobulin antibody reactive with both the specific thyroglobulin and the other thyroglobulin [forming] to form conjugates of the anti-thyroglobulin antibody and all the thyroglobulin in the sample including specific thyroglobulin conjugates formed in (a), and

(b)(i) determining a total amount of conjugates formed of the anti-thyroglobulin antibody with both of the specific thyroglobulin and the other thyroglobulin, and

(ii) determining an amount of conjugates formed of said specific lectin or said specific antibody with the specific thyroglobulin,

wherein determining the amount of conjugates formed in (b)(i) corresponds to the total amount of thyroglobulin and determining the amount of conjugates formed in (b)(ii) corresponds to the amount of specific thyroglobulin.

22. (Amended) A method for determining malignancy of a thyroid tumor, comprising:

(1) measuring the total amount of thyroglobulin and an amount of one of two types of thyroglobulin in a fluid sample originating from a living body, the two types of thyroglobulin in the sample being a specific thyroglobulin, which is thyroglobulin having a sugar chain with a specific

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structure to which a specific lectin or a specific antibody is capable of binding; and other thyroglobulin, which is thyroglobulin having a sugar chain other than the specific sugar chain to which said specific lectin or said specific antibody is capable of binding; the steps comprising:

(a)(i) adding to the sample said specific lectin or said specific antibody [forming] to form conjugate-1 of said specific lectin or said specific antibody with the specific thyroglobulin, and

(ii) adding to the sample an anti-thyroglobulin antibody reactive with both the specific thyroglobulin and the other thyroglobulin [forming] to form conjugates of the anti-thyroglobulin antibody and all the thyroglobulin in the sample including specific thyroglobulin conjugates formed in (a), and

(b)(i) determining an amount of conjugate-1 formed in step (a)(i) of said specific lectin or said specific antibody with the specific thyroglobulin, and

(ii) determining a total amount of conjugates formed in step (a)(ii) of the anti-thyroglobulin antibody with both of the specific thyroglobulin and the other thyroglobulin, and

(2) determining the malignancy of the thyroid tumor by comparing the calculated ratio with a predetermined ratio from a fluid sample originating from a living body having:

- (i) normal thyroid;
- (ii) benign thyroid; or
- (iii) thyroid carcinoma;

the calculated ratio of the fluid sample originating from a living body having thyroid carcinoma being significantly higher or lower than that of the fluid sample originating from a living body

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having the normal thyroid or the fluid sample originating from a living body having the benign thyroid.

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